



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

5e

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/502,478	02/11/2000	Kira Sterling Attwood	RSW9-99-129	5209
46320	7590	04/15/2005	EXAMINER	
CHRISTOPHER & WEISBERG, PA 200 E. LAS OLAS BLVD SUITE 2040 FT LAUDERDALE, FL 33301			HO, THOMAS M	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/502,478

Applicant(s)

ATTWOOD ET AL.

Examiner

Thomas M Ho

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 29 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-16 are pending.
2. The amendment of 12/29/04 has been received and entered.

Response to Arguments

The Applicant argues: (page 2, paragraph 3)

Notwithstanding, Chebrolu does not address the problem of defending against network connection flooding attacks. Rather, Chebrolu relates exclusively to an attempt to facilitate the establishment of a connection ms compared to the denial of an attempt to establish a connection. In fact, nowhere in Chebrolu is it ever suggested that a network flooding attack can be detected and processed. Rather, at best Chebrolu mentions that "customer service" can be adversely affected "when a user/client's request for an ISP connection is denied due to lack of allocable channel capacity".

The Examiner contends that Applicant's recitation in the preamble to the claim "a method of preventing a flooding attack" is not read as a limitation because it merely recites an intended usage. Thus such element is not required to be shown in the references.

MPEP 2111.02 states:

Art Unit: 2134

"If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is no significance to claim construction" Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also Rowe v. Dror, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997) ("where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation")

Secondly the Examiner contends that arguing that "Chebrolu has nothing to do with defending against network connection flooding attacks"(Applicant's arguments, paragraph 2, page 3) is irrelevant because the rejection is anticipatory.

MPEP 2131.05 States:

"Arguments that the alleged anticipatory prior art is 'nonanalogous art' or 'teaches away from the invention' or is not recognized as solving the problem solved by the claimed invention, [are] not 'germane' to a rejection under section 102." Twin Disc, Inc. v. United States, 231 USPQ 417, 424 (Cl. Ct. 1986) (quoting In re Self, 671 F.2d 1344, 213 USPQ 1, 7 (CCPA 1982)).

"A reference may be directed to an entirely different problem than the one addressed by the inventor, or may be from an entirely different field of endeavor than that of the claimed

Art Unit: 2134

invention, yet the reference is still anticipatory if it explicitly or inherently discloses every limitation recited in the claims."

The Examiner further contends that even if the preamble is to be construed as an additional claim limitation, Applicant's statement "*Rather, at best Chebrolu mentions that "customer service" can be adversely affected "when a user/client's request for an ISP connection is denied due to lack of allocable channel capacity."*", is precisely and even an eloquent description of what a flooding attack is. A flooding attack is a method of attack on a network by flooding a server with more requests than the server is equipped to handle so that that ordinary users are denied service.

Applicant(page 4, paragraph 1) further argues with regards to the Mutaf reference:

Significantly, nowhere in Mutaf is it ever suggested that a connection can be denied. In fact, the very nature of a SYN flood attack is to never complete a connection, but to merely flood a device with "half-open" connections.

While it is true that the nature of a SYN flood attack is to never complete a connection, the flooding of a device with "half-open" connections inevitably denies connections to real users. That is the entire point of a network flooding attack. The Examiner disagrees that Mutaf in no way suggests that a connection can be denied. Such a suggestion is inherent to that which makes the network attack, a network attack.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Chebrolu, US patent 6754714.

5. Claim 1, 5, 9, 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Mutaf.

In reference to claim 1:

Chebrolu(Column 1, lines 15-30) discloses a method of preventing a flooding attack on a network server in which a large number of requests are received for connection to a port number on the server, comprising:

Determining, in response to a request from a host for a connection to a port number on the server, if the number of connections to the port assigned to the host exceeds a prescribed threshold, where the host is the client and server is the ISP (Column 2, lines 20-25)

Art Unit: 2134

Denying the request for a connection, where a request for a connection to the server is denied when the maximum is reached. (Column 1, lines 24-30)

In reference to claim 2:

Chebrolu discloses the method of claim 1 in which denying the request further comprises:

Overriding the denial and allowing the request if a quality of service parameter pertaining to the requesting host permits the override, where the initial override or denial of the request is overridden (Column 1, lines 45-50), and the request is tended to by allocating to the new user (Column 3, line 20-37) & (Column 4, line 40 – Column 5, line 7), a connection in order to better maintain quality of service for a greater number of users. (Column 3, lines 15-19)

In reference to claim 3:

Chebrolu (Column 5, lines 30-37) discloses the method of claim 2 wherein a connection request is denied in any event if the number of available connections to the port are less than a constrained threshold, where the constrained threshold is the prescribed threshold ratio that specifies a kind of absolute maximum number of connections which can be sustained.

In reference to claim 4:

The method of claim 1 or claim 2 or claim 3 further comprising:

Chebrolu (Column 5, lines 30-37) discloses calculating the prescribed threshold by multiplying a percentage P by the number of available connections remaining for the port, where the

Art Unit: 2134

percentage P of the number of available connections is expressed in the mathematically equivalent form of a ratio.

In reference to claim 1:

Mutaf(page 6, Section 5 “Detection Method”) discloses a method of preventing a flooding attack on a network server in which a large number of requests are received for connection to a port number on the server, comprising:

Determining, in response to a request from a host for a connection to a port number on the server, if the number of connections to the port assigned to the host exceeds a prescribed threshold, where the threshold is the critical value.

Denying the request for a connection, where if the threshold is reached, the computer determines a DoS attack is taking place and refuses requests.

Claims 5-8, 9-12, 13-16 are substantially similar to the method of claims 1-4 and are rejected for the same reasons.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of the final action and the advisory action is not mailed under after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension pursuant to 37 CFR 1.136(A) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication from the examiner should be directed to Thomas M Ho whose telephone number is (571)272-3835. The examiner can normally be reached on M-F from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (571)272-3838.

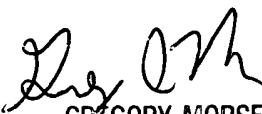
The Examiner may also be reached through email through Thomas.Ho6@uspto.gov

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

General Information/Receptionist Telephone: 571-272-2100 Fax: 703-872-9306
Customer Service Representative Telephone: 571-272-2100 Fax: 703-872-9306

TMH

April 07th, 2005


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Application/Control Number: 09/502,478

Page 9

Art Unit: 2134